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mounting the endshield to the motor housing such that the capacitor cover covers the at least one capacitor terminal.

PLEASE ADD THE FOLLOWING NEW CLAIM

22. (new) An endshield in accordance with Claim 7 further comprising a capacitor cover extending radially outward from said body.

REMARKS

Add 7
C6

The Office Action mailed January 3, 2002 has been carefully reviewed and the foregoing amendment has been made in consequence thereof. Submitted herewith is a Submission of Marked Up Claims.

Claims 1-21 are now pending in this application. Claims 1-21 stand rejected. Claim 11 stands objected to. Claim 22 is newly added.

A fee calculation sheet for the newly added claim along with authorization to charge a deposit account in the amount of the calculated fee are submitted herewith.

The objection to Claim 11 due to an informality is respectfully traversed. More specifically, Claim 11 and the specification have been amended to recite "circumferential direction". For the reasons set forth above, Applicants request that the objection to Claim 11 be withdrawn.

The rejection of Claims 1-6, 14-16, and 18-21 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,357,161 (Daniels) is respectfully traversed.

Daniels describes an enclosure 3 for a motor assembly 1 including a first endshield 15 and a second end shield 41. Enclosure 3 includes a housing 47 which at least partly covers endshield 15 and a capacitor cover 49. Cover 49 is fastened to endshield 15 using a single screw and pivots with respect to housing 47. Endshield 15 includes a circumferential wall 21 and a plurality of screw holes 23 formed in the corners of wall 21.

Claim 1 recites an endshield for an electric motor, said end shield comprising "a body...a capacitor cover integral with said body".

Daniels does not describe nor suggest an endshield for an electric motor, wherein the end shield includes a body and a capacitor cover that is integral with the body. Specifically, Daniels does not describe nor suggest a capacitor cover that is integral with the body of an endshield. Rather, Daniels describes an enclosure for a motor assembly, wherein a capacitor cover is fastened to an endshield using a screw. For at least the reasons set forth above, Claim 1 is submitted to be patentable over Daniels.

Claims 2-6 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-6 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-6 likewise are patentable over Daniels.

Claim 14 recites an electric motor assembly comprising "a motor housing...an endshield connected to said housing, said endshield comprising a body and at least one mounting ear extending from said body, said at least one mounting ear having a slot extending completely therethrough."

Daniels does not describe nor suggest an electric motor assembly including a motor housing and an endshield connected to the housing, wherein the endshield includes a body and at least one mounting ear extending from the body and having a slot extending therethrough. Specifically, Daniels do not describe nor suggest an endshield including a body and at least one mounting ear that has a slot extending completely therethrough. Rather, Daniels describes an endshield including a wall and a plurality of screw holes formed in the corners of the wall, but do not describe nor suggest that the screw holes extend completely through the corners of the wall. Indeed, Applicants respectfully submit that Figure 1 of Daniels illustrates screw holes that extend only partially through the corners of the wall. For at least the reasons set forth above, Claim 14 is submitted to be patentable over Daniels.

Claims 15 and 16 depend, directly or indirectly, from independent Claim 14. When the recitations of Claims 15 and 16 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 15 and 16 likewise are patentable over Daniels.

Claim 18 recites a method of mounting an electric motor assembly to a machine, the electric motor assembly including a capacitor and an endshield, the endshield including a

body, said method comprising "providing a capacitor cover integral with and extending from the endshield body".

Daniels does not describe nor suggest a method of mounting an electric motor assembly to a machine, wherein the electric motor assembly includes a capacitor and an endshield, the endshield includes a body, and the method includes providing a capacitor cover integral with and extending from the endshield body. Specifically, Daniels does not describe nor suggest providing a capacitor cover that is integral with an endshield body. Rather, Daniels describes an enclosure for a motor assembly, wherein a capacitor cover is fastened to an endshield using at least one screw. For at least the reasons set forth above, Claim 18 is submitted to be patentable over Daniels.

Claims 19-21 depend, directly or indirectly, from independent Claim 18. When the recitations of Claims 19-21 are considered in combination with the recitations of Claim 18, Applicants submit that dependent Claims 19-21 likewise are patentable over Daniels.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-6, 14-16, and 18-21 be withdrawn.

The rejection of Claims 7 and 10-12 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,834,869 (Morgan et al.) is respectfully traversed.

Morgan et al. describe a blower motor housing 60 for an electric motor 40 used in combination with a fuel burner 10. Motor housing 60 has a generally "cup" shaped configuration with an open end 66 that communicates with an opening 16 in a side wall 14 of a housing 12 of fuel burner 10. Motor housing 60 is mounted to burner housing 12 with open end 66 in register with opening 16 in burner housing 12, thereby joining an interior of motor housing 60 with an interior of burner housing 12. Electric motor 40 is mounted within motor housing 60 with at least a portion of a stator winding 86 extending axially beyond open end 66 of motor housing 60 and into the interior of burner housing 12. A squirrel cage blower wheel 50 is mounted to a rotor shaft 46 substantially concentric with stator winding 86 and extends at least partially along the axial length of stator winding 86 such that, during operation of burner 10, cool intake air is moved past stator winding 86 as it is drawn into blower wheel 50. Motor housing 60 includes a plurality of mounting ears each including a slot.

Claim 7 recites an endshield for an electric motor, wherein the end shield comprises "a body...at least one mounting ear extending from said body".

Morgan et al. do not describe nor suggest an endshield for an electric motor, wherein the end shield includes a body and at least one mounting ear extending from the body. Rather, Morgan et al. describe a motor housing having a generally "cup" shaped configuration with an open end that communicates with an opening in a side wall of a fuel burner housing. Accordingly, Morgan et al. do not describe nor suggest an endshield for an electric motor, much less an endshield including at least one mounting ear. Rather, Morgan et al. describe a plurality of mounting ears extending from a motor housing that does not include an endshield. For at least the reasons set forth above, Claim 7 is submitted to be patentable over Morgan et al.

Claims 10-12 depend, directly or indirectly, from independent Claim 7. When the recitations of Claims 10-12 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claims 10-12 likewise are patentable over Morgan et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 7 and 10-12 be withdrawn.

The rejection of Claims 8, 9, and 13 under 35 U.S.C. § 103(a) as being unpatentable over Morgan et al. in view of U.S. Patent No. 5,945,272 (Ochi et al.) is respectfully traversed.

Morgan et al. are described above. Ochi et al. describe an alternator for motor vehicles having a mounting structure suitable for mounting to an engine. The mounting structure includes a front bracket 1, a stator 5, a rear bracket 6, and at least one mounting projecting section 21a having U-grooves 31a. Section 21a is formed integrally with each of front bracket 1 and rear bracket 6 thereby constituting a housing for mounting the alternator to an engine.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Morgan et al. nor Ochi et al., considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully

submit that it would not be obvious to one skilled in the art to combine Morgan et al. with Ochi et al., because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Rather, only the conclusory statement that "it would have been obvious at the time the invention was made to a person having ordinary skill in the art to include in the at least one mounting ear with an opening extending therethrough and a first side, and to extend the slot through said mounting ear from said opening through said first side as taught by Ochi et al." suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Applicants respectfully submit however, that a closer examination of the prior art would reveal that the prior art teaches away from the present invention. More specifically, Morgan et al. describe a motor housing including a plurality of mounting ears and having a generally "cup" shaped configuration with an open end that communicates with an opening in a side wall of a fuel burner housing, but do not describe nor suggest that the motor housing includes an endshield, and Ochi et al. describe a front and a rear bracket for mounting an alternator to an engine, wherein each of the brackets include at least one mounting projecting section having U-grooves. Accordingly, it appears that one skilled in the art would not be motivated to replace the mounting ears described in Morgan et al. with a front or rear alternator bracket including at least one mounting projecting section having U-grooves, as described in Ochi et al., because the motor housing described in Morgan et al. does not include an endshield.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick

and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

Further, and to the extent understood, neither Morgan et al. nor Ochi et al., considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claims 8 and 9 depend, directly or indirectly, from independent Claim 7 which recites an endshield for an electric motor, wherein the end shield comprises "a body...at least one mounting ear extending from said body".

Neither Morgan et al. nor Ochi et al., considered alone or in combination, describe nor suggest an endshield for an electric motor, wherein the end shield includes a body and at least one mounting ear extending from the body. Rather, Morgan et al. describe a motor housing having a generally "cup" shaped configuration with an open end that communicates with an opening in a side wall of a fuel burner housing. Accordingly, Morgan et al. do not describe nor suggest an endshield for an electric motor, much less an endshield including at least one mounting ear. Rather, Applicants respectfully submit that Morgan et al. describe a plurality of mounting ears extending from a motor housing that does not include an endshield. Furthermore, Ochi et al. describe a front and a rear bracket for mounting an alternator to an engine, wherein each of the brackets include at least one mounting projecting section having U-grooves. For at least the reasons set forth above, Claim 7 is submitted to be patentable over Morgan et al. in view of Ochi et al.

Claims 8 and 9 depend, directly or indirectly, from independent Claim 7. When the recitations of Claims 8 and 9 are considered in combination with the recitations of Claim 7, Applicants submit that dependent Claims 8 and 9 likewise are patentable over Morgan et al. in view of Ochi et al.

Claim 13 recites an endshield for an electric motor, wherein the endshield comprises "a body and at least one mounting ear extending from said body".

Neither Morgan et al. nor Ochi et al., considered alone or in combination, describe nor suggest an endshield for an electric motor, wherein the end shield includes a body and at least one mounting ear extending from the body. Rather, Morgan et al. describe a motor housing having a generally "cup" shaped configuration with an open end that communicates with an opening in a side wall of a fuel burner housing. Accordingly, Morgan et al. do not describe nor suggest an endshield for an electric motor, much less an endshield including at least one mounting ear. Rather, Applicants respectfully submit that Morgan et al. describe a plurality of mounting ears extending from a motor housing that does not include an endshield. Furthermore, Ochi et al. describe a front and a rear bracket for mounting an alternator to an engine, wherein each of the brackets include at least one mounting projecting section having U-grooves. For at least the reasons set forth above, Claim 13 is submitted to be patentable over Morgan et al. in view of Ochi et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 8, 9, and 13 be withdrawn.

The rejection of Claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Daniels in view of U.S. Patent No. 5,742,108 (Kuribayashi et al.) is respectfully traversed.

Daniels is described above. Kuribayashi et al. describe a vehicle generator having a duct cover 15. Duct cover 15 can be adjustably rotated in a circumferential direction such that an intake vent 4 on dust cover 15 can be optimally positioned. Duct cover 15 includes a mounting flange 21 having a plurality of through-bolt passing holes 22.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Daniels nor Kuribayashi et al., considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Daniels with Kuribayashi et al., because there is no motivation to combine the references suggested in

the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Rather, only the conclusory statement that "it would have been obvious at the time the invention was made to a person having ordinary skill in the art to extend the slot through the mounting ear as taught by Kuribayashi et al." suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

Further, and to the extent understood, neither Daniels nor Kuribayashi et al., considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 17 depends from independent Claim 14 which recites an electric motor assembly comprising "a motor housing...an endshield connected to said housing, said

endshield comprising a body and at least one mounting ear extending from said body, said at least one mounting ear having a slot extending completely therethrough.”

Neither Daniels nor Kuribayashi et al., considered alone or in combination, describe nor suggest an electric motor assembly including a motor housing and an endshield connected to the housing, wherein the endshield includes a body and at least one mounting ear extending from the body and having a slot extending therethrough. Specifically, neither Daniels nor Kuribayashi et al., considered alone or in combination, describe nor suggest an endshield including a body and at least one mounting ear having a slot extending completely therethrough. Rather, Daniels describes an endshield including a wall and a plurality of screw holes formed in the corners of the wall, but do not describe nor suggest that the screw holes extend completely through the corners of the wall. Indeed, Applicants respectfully submit that Figure 1 of Daniels illustrates the screw holes extending only partially through the corners of the wall. Furthermore, Kuribayashi et al. describe a vehicle generator having a duct cover that includes a mounting flange having a plurality of through-bolt passing holes, and can be adjustably rotated in a circumferential direction such that an intake vent on the dust cover 15 can be optimally positioned. For at least the reasons set forth above, Claim 14 is submitted to be patentable over Daniels in view of Kuribayashi et al.

Claim 17 depends from independent Claim 14. When the recitations of Claim 17 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claim 17 likewise is patentable over Daniels in view of Kuribayashi et al.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claim 17 be withdrawn.

Newly added Claim 22 depends from independent Claim 7, which is submitted to be in condition for allowance. When the recitations of Claim 22 are considered in combination with the recitations of Claim 7, Applicants submit that Claim 22 likewise is in condition for allowance.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Robert B. Reeser III', is written over a horizontal line.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Franz et al.

Serial No.: 09/681,866

Filed: June 19, 2001

For: ENDSHIELD FOR AN ELECTRIC MOTOR

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: Art Unit: 2834
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: Examiner: Dang D. Le
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:
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SUBMISSION OF MARKED UP PARAGRAPH AND CLAIMS

Commissioner for Patents
Box FEE AMENDMENT
Washington, D.C. 20231

Sir:

Submitted herewith are marked up claims in accordance with 37 C.F.R. Section 1.121(c)(1)(ii).

IN THE SPECIFICATION

Please amend paragraph number 24 as follows:

Referring now to Figure 5, endshield 10 includes capacitor cover 14 extending from body 12 and mounting ears 16 extending from body 12. Slots 54 of mounting ears 16 are shown as pointing in a generally counterclockwise [radial] circumferential direction, away from second side 60. Because slots 54 form a continuous opening through mounting ear 16 from opening 52 through first side 50, and because slots 54 point in generally the same [radial] circumferential direction, motor assembly 80, including endshield 10, can be easily removed from a machine (not shown) or appliance (not shown) by loosening the mounting bolts (not shown) or nuts (not shown) and rotating motor assembly 80, clockwise as shown in Figure 5, on central axis 84. Endshield 10 thus permits assembly and disassembly of motor assembly 80, including endshield 10, without complete removal of the mounting bolts or nuts. In an alternative embodiment, endshield 10 includes two mounting ears 16 having slots 54 that point in generally opposite [radial] circumferential directions. In such an embodiment, motor assembly 80, including endshield 10, can be easily removed by loosening the mounting bolts (not shown) or nuts (not shown), and moving motor assembly 80 in a direction such that the mounting bolts or nuts can exit slots 54.

IN THE CLAIMS

1. (once amended) An endshield for an electric motor, said end shield comprising:
- a body; and
- a capacitor cover integral with said body and extending radially outward from said body.
11. (once amended) An endshield in accordance with Claim 10 wherein said plurality of slots pointing in generally the same [radial] circumferential direction.
14. (once amended) An electric motor assembly comprising:
- a motor housing;
- a stator mounted in said housing and comprising a bore therethrough, said stator having at least one main winding and at least one auxiliary winding;
- a rotor core rotatably mounted in said housing and extending through said stator bore;
- a capacitor in series with said auxiliary winding; and
- an endshield connected to said housing, said endshield comprising a body and at least one mounting ear extending from said body, said at least one mounting ear having a slot extending completely therethrough.
17. (once amended) An electric motor assembly in accordance with Claim 14 wherein said at least one mounting ear further comprising a front face, a back face, an opening extending therethrough, and a first side, said opening extending through said front face and said back face, said slot extending through said mounting ear from said opening through said first side.
18. (once amended) A method of mounting an electric motor assembly to a machine, the electric motor assembly including a motor housing, a capacitor having at least one terminal, and an endshield, the endshield including a body, said method comprising:
- providing a capacitor cover integral with and extending from the endshield body; and

mounting the endshield to the motor housing such that the capacitor cover covers the at least one capacitor terminal.

PLEASE ADD THE FOLLOWING NEW CLAIM

22. (new) An endshield in accordance with Claim 7 further comprising a capacitor cover extending radially outward from said body.

Respectfully Submitted,



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